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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

67,108-322; Rai 4-2

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I hereby certify that this Pre-Appeal Brief Request For Review and Notice of Appeal are being facsimile transmitted to (571) 273-8300.

on 3 December 2007

Signature

Typed or printed name David Gaskey

Application Number

10/717,065

Filed

11/19/2003

First Named Inventor

Rai, Vikram

Art Unit

2617

Examiner

Cho, Un C.

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

 applicant/inventor. assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96) attorney or agent of record.
Registration number 37,139 attorney or agent acting under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34


Signature

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3 December 2007

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.
Submit multiple forms if more than one signature is required, see below*.

*Total of 1 forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Rai, Vikram
Serial Number: 10/717,065
Filed: 11/19/2003
Group Art Unit: 2617
Examiner: Cho, Un C.
Title: METHOD AND APPARATUS FOR SCHEDULING FORWARD DATA BURSTS IN WIRELESS NETWORK

REQUEST FOR PRE-APPEAL BRIEF REVIEW

Mail Stop AF
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This paper is submitted along with the Notice of Appeal indicating that Applicant is appealing the final rejection of claims 4 and 12.¹

Applicant's invention provides a way of arranging a permanent virtual pipe on a communication channel that facilitates a unique manner of scheduling data bursts on that channel. In particular, claims 4 and 12 include a permanent virtual pipe comprising a plurality of different width virtual pipes and at least one burst segment of each data burst is scheduled on the widest of the pipes. There is nothing in the cited references that discloses or in any way suggests such an arrangement. Therefore, Applicant respectfully submits that there is no *prima facie* case of obviousness against either of claims 4 or 12.

¹ Applicant attempted to amend independent claim 1 by incorporating the limitations of dependent claim 4 and to amend independent claim 8 by incorporating the limitations of dependent claim 12 in response to the final action. That amendment was not entered. Applicant is willing to make the same amendment in the event that the review pursuant to this request results in a decision that claims 4 and 12 are allowable.

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Claim 4, if rewritten in independent form, recites:

A method at a base station in a code division multiple access wireless network that transmits data bursts on a high-speed forward channel, the method comprising the steps of:

providing at least one permanent virtual pipe comprising a plurality of different width virtual pipes on the high-speed forward channel for transmission of the data bursts, at least one of the plurality of different width permanent virtual pipes being wider than another of the virtual pipes;

scheduling transmission of burst segments of the data bursts on the at least one permanent virtual pipe in a round-robin manner among different data bursts, at least one burst segment of each data burst being scheduled for transmission on the widest virtual pipe; and

transmitting the burst segments on the at least one virtual pipe in accordance with the scheduling.

Claim 12 is directed to a base station having a corresponding configuration.

Claims 4 and 12 were finally rejected under 35 U.S.C. §103 based upon the proposed combination of *Lee* (US 2001/0021180), APA and *Sindhushayana, et al.* (US Patent No. 6,987,778). Applicant respectfully disagrees with the Examiner's position that *Sindhushayana, et al.* "remedies the deficiencies of *Lee* in view of the APA." The Examiner properly acknowledges that *Lee* and the APA "does not specifically disclose wherein the at least one permanent virtual pipe comprises a plurality of different width virtual pipes, at least one of the plurality of virtual pipes being wider than another of the virtual pipes, at least one burst segment of each data burst being scheduled for transmission on the widest virtual pipe." Applicant respectfully submits that the different data rates used in the *Sindhushayana, et al.* reference do not provide that, either, because the data rates do not constitute different width virtual pipes and certainly none that are permanent. At best, using the *Sindhushayana, et al.* technique would result in using different data rates at different times on the high speed forward

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channel of *Lee*. That is not the same thing as providing a permanent virtual pipe comprising a plurality of pipes of different widths.

Additionally, the *Sindhushayana, et al.* reference does not include having at least one burst segment of each data burst scheduled on a widest virtual pipe. Even if the data rates of the *Sindhushayana, et al.* reference could be reasonably interpreted as different width virtual pipes, the *Sindhushayana, et al.* reference does not schedule at least one burst segment of each data burst at the highest data rate. Instead, the *Sindhushayana, et al.* reference uses a technique that chooses a data rate based upon a DRC message from a mobile station.

For example, paragraph [0047], beginning at line 8, teaches that a remote station determines channel conditions and transmits a DRC message that requests a "low data rate packet" if the channel conditions are not favorable. The base station of the *Sindhushayana, et al.* reference then transmits packets according to parameters stored in the scheduling unit, which will include a low data rate. That is not the same as always having at least one burst segment scheduled at the highest possible rate. Therefore, even if the different data rates of the *Sindhushayana, et al.* reference hypothetically could reasonably be interpreted as different width virtual pipes, the *Sindhushayana, et al.* reference does not schedule at least one burst segment of each data burst at the highest data rate. Therefore, it is impossible to interpret the *Sindhushayana, et al.* reference as stated on page 5 of the Office Action where the Examiner contends that the reference teaches "at least one burst segment of each data burst being scheduled for transmission on the widest virtual pipe."

Paragraph [0049] of the *Sindhushayana, et al.* reference, beginning at line 17, teaches that the rate control algorithm provides a lower bound estimate for actual SINR during a next packet duration and determines a maximum data transmission rate that could be sustained

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based on the SINR lower bound estimate. Paragraph [0049] of the *Sindhushayana, et al.* reference also teaches using "a conservative measure of the data transmission rate at which the next packet can be received." In other words, the *Sindhushayana, et al.* reference does not always use the maximum data rate. It, therefore, cannot possibly always schedule at least one burst segment of a data burst at the highest data rate. It follows that it is impossible to interpret the reference as teaching scheduling at least one burst segment of each data burst on a widest virtual pipe (assuming only for the sake of discussion that a highest data rate can be interpreted as a widest virtual pipe).

Even if the proposed combination of *Lee*, APA and *Sindhushayana, et al.* could be made, there is nothing within that combination that teaches the limitations in claims 4 and 12 concerning providing a plurality of permanent virtual pipes where at least one pipe is wider than others with at least one burst segment of each data burst scheduled for transmission on the widest of the virtual pipes. Because that is completely missing from the proposed combination, there is no *prima facie* case of obviousness and claims 4 and 12 are allowable.

As claims 4 and 12 are the only claims on appeal, Applicant believes that there is no remaining issue that would warrant this case being forwarded to the Board because there is no *prima facie* case of obviousness against either of those claims.

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If the Examiner believes that a telephone conference would be useful for moving this case forward to being issued, Applicant's representative will be happy to discuss any issues regarding this application and can be contacted at the telephone number indicated below.

Respectfully submitted,

CARLSON, GASKEY & OLDS



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Dated: December 3, 2007

CERTIFICATE OF FACSIMILE

I hereby certify that this Request for Pre-Appeal Brief Review, relative to Application Serial No. 10/717,065, is being facsimile transmitted to the Patent and Trademark Office (Fax No. (571) 273-8300) on December 3, 2007.



David Gaskey